

CLAIMS

1. A hip control apparatus for a wheelchair having a frame and a seat with a seat back attached to the frame, that apparatus comprising:

a first padded hip support on one side of the seat for positioning a hip of a person on the seat and having a first flexible arm extending toward the front of the wheelchair;

a second padded hip support on an opposite side of the seat for positioning another hip of the person and having a second flexible arm extending toward the front of the wheelchair; and

a seat belt with a first segment attached to the first padded hip support, a second segment attached to the second padded hip support, and a connector to secure the first and second segments together, wherein securing the first and second segments together causes the first and second arms to bend around the person.

2. The hip control apparatus as recited in claim 1 wherein each of the first padded hip support and the second padded hip support comprises a bracket for coupling to one of the seat back and the frame.

3. The hip control apparatus as recited in claim 1 wherein each of the first padded hip support and the second padded hip support comprises a main portion for abutting the hip of the person with the respective one of the first flexible arm and the second flexible arm projecting from the main portion.

4. The hip control apparatus as recited in claim 1 wherein each of the first padded hip support and the second padded hip support comprises a resiliently flexible primary plate extending through the main portion and the respective one of the first flexible arm and the second flexible arm; and a secondary plate in the main portion thereby rendering the main portion less flexible than the respective one of the first flexible arm and the second flexible arm.

5. A hip control apparatus for a wheelchair having a frame and a seat with a seat back attached to the frame, that apparatus comprising:

a first hip support at one side of the seat and having a resiliently flexible first arm extending toward the front of the wheelchair, a first resilient pad for cushioning a hip of a person on the seat, and a first fastener for attachment to the wheelchair;

a second hip support at an opposite side of the seat and having a resiliently flexible second arm extending toward the front of the wheelchair, a second resilient pad for cushioning a hip of a person on the seat, and a second fastener for attachment to the wheelchair; and

a seat belt having a first segment attached to the first hip support, a second segment attached to the second hip support, and a connector to secure the first and second segments together, wherein securing the first and second segments together causes the first and second arms to bend around the person.

6. The hip control apparatus as recited in claim 5 wherein each of the first and second hip supports comprises main portion for abutting a pelvic region of the person and the respective first or second arm projecting from the main pad.

7. The hip control apparatus as recited in claim 6 wherein the first and second hip supports each further comprises a resiliently flexible primary plate extending through the main portion and the respective first or second arm; and a secondary plate extending through the main portion thereby rendering the main portion less flexible than the respective first or second arm.

8. The hip control apparatus as recited in claim 7 wherein the first resilient pad is attached to both the main portion and the first arm of the first hip support, and the second resilient pad is attached to both the main portion and the second arm of the second hip support.

9. The hip control apparatus as recited in claim 7 wherein the first segment of the seat belt is attached to at least one of the primary plate, the secondary plate, and the first fastener of the first hip support, and the second segment of the seat belt is attached to at least one of the primary plate, the secondary plate, and the second fastener of the second hip support.

10. The hip control apparatus as recited in claim 5 wherein the resilient pads of the first and second hip supports each is fabricated of foam cell material.

11. The hip control apparatus as recited in claim 5 wherein the first and second fasteners attach to one of the seat back and the frame.

12. A hip control apparatus for a wheelchair that has a frame and a seat with a seat back attached to the frame, the hip control apparatus comprising:

a first hip support for positioning at one side of the seat and a second hip support for positioning at an opposite side of the seat, each of the first and second hip supports has a main portion from which a resiliently flexible arm projects toward the front of the wheelchair, and comprises a plate structure extending through the main portion and the arm, a bracket adjustably connected to the plate structure for coupling to one of the seat back and the frame, and a pad supported by the plate structure; and

a seat belt having a first segment attached to the first hip support, a second segment attached to the second hip support, and a connector to secure the first and second segments together, wherein securing the first and second segments together causes the first and second arms to bend around a person seated in the wheelchair.

13. The hip control apparatus as recited in claim 12 wherein the first segment of the seat belt is coupled to the plate structure of the first hip support and to one component of the connector; and the second segment of the seat belt is coupled to the plate structure of the second hip support and to another component of the connector.

14. The hip control apparatus as recited in claim 12 wherein the first segment of the seat belt has a first end portion secured to a first anchor that is attached to the first hip support and a second end portion connected to one component of the connector; and the second segment of the seat belt has a third end portion secured to a second anchor that is attached to the second hip support and a fourth end portion connected to another component of the connector.

15. The hip control apparatus as recited in claim 12 wherein the first anchor is connected to the bracket for the first hip support, and the second anchor is connected to the bracket for the second hip support.

16. The hip control apparatus as recited in claim 12 further comprising a first guide attached to the arm of the first hip support and engaging the first segment of the seat belt; and a second guide attached to the arm of the second hip support and engaging the second segment of the seat belt.

17. The hip control apparatus as recited in claim 12 wherein the main portion of each of the first and second hip supports has a circular shape.

18. The hip control apparatus as recited in claim 12 wherein the arm of each of the first and second hip supports has an elongated shape that has a height which is less than a height of the respective main portion.

19. The hip control apparatus as recited in claim 17 wherein the plate structure comprises a resiliently flexible primary plate extending through the main portion and the arm; and a secondary plate in the main portion thereby rendering the main portion less flexible than the arm.

20. The hip control apparatus as recited in claim 12 wherein the plate structure comprises a resiliently flexible primary plate extending through the main portion and the arm; and a secondary plate abutting the primary plate in the main portion, thereby rendering the main portion less flexible than the arm.